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Network Working Group
Request for Comments: 40

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More Comments on the Forthcoming Protocol

We have recently discussed NWG/RFC Nos. 36 and 39 with Steve Crocker, UCLA. Steve has asked that we elaborate on the errors, queries, and HOST status that were mentioned in NWG/RFC #39.

Please voice your opinions soon in order to affect the forthcoming protocol specifications.

ERROR MESSAGES

<ERR> <Code> <Command length> <Command in error>

<Code> is an eight-bit field that specifies the error type. The assigned codes are shown below. <Command length> is a 16-bit integer that indicates the length of the <Command in error> in bits. The <Command in error> is the spurious command.

The ranges of <Code> are shown below in hexidecimal.

00	Unspecified error types
01-0F	Resource errors
10-1F	Status errors
20-2F	Content errors
30-FF	Unused

Specific values of <Code> are shown below with their meaning.

<Code> value	Semantics
00	Unspecified errors.
01	Request for an invalid resource.
02	Request for an exhausted resource, try later.
03-0F	Unused.
10	Invalid <RSM>, i.e., link connected but unblocked.
11	Invalid <SPD>.
12	Invalid <ASG>, i.e., connected but no <RDY> received.

<Code> value	Semantics
13	Message received on blocked link.
14-1F	Unused.
20	Unknown command code.
21	Message received on unconnected link.
22	Invalid <RFC>.
23	Invalid <CLS>.
24	Invalid <RSM>, i.e., link not connected.
25	Invalid <FND>.
26	Invalid <END>.
27	Invalid <RDY>.
28	Invalid <ASG>, i.e., not connected.
29-2F	Unused.
30-FF	Unused.

QUERIES

<QRY> <My Socket>
or <RPY> <Your Socket> <Text>

The <QRY> is the query indicated in NWG/RFC #39 and <RPY> is the reply. The format of <Text> is shown below; also refer to NWG/RFC #36, p. 3.

<Text> ::= <16 bit count of relevant connection table entries>
<relevant connection table entries>

<relevant connection table entries> ::= <relevant connection table entries>
<a relevant connection table entry>
| <a relevant connection table entry>

<a relevant connection table entry> ::= <local socket> <foreign socket>
<link> <connection state>
<flow state and buffer control>
<reconnection control state>

HOST STATUS

<NOP>

An NCP may be up, down, pending, etc. When an NCP changes its state to UP it should send a <NOP> to each remote NCP which indicates the NCP is available. The sending NCP can then construct a vector of HOST status from the RFNMs it receives. An NCP receiving a <NOP> can update the availability of the sending NCP in its HOST status vector.